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## SUMMARY

Agenda Item: C.4.1

Ivory Coast

# COCONUT PALM SELECTION ON THE IVORY COAST

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of the I.R.H.O.

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# COCO-NUT PALM SELECTION ON THE IVORY COAST

by

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## S U M M A R Y

1) IMPORTATION: The coco-nut palm is of very ancient culture. Its selection had been empirical for a long time. For the last 30 years, however, it has been studied in research stations in the Far East and the Pacific, then, much later, at I.R.H.O. station Port Bouet, Ivory Coast.

a) Origin of the West African coco-nut palm. It was imported 300 years ago by Portuguese sailors from Tropical Africa. Its genetic power is low (frequently recessive characteristics appear, there is a total lack of different forms or Asian varieties.)

b) The West African coco-nut tree is of the following types :

- Typica with bunches of nuts, small size nuts (New Hebrides)

- Typica - small number of big nuts (Polynesia). The West African coco-nut palm has the following characteristics : heavy nut producer, small nuts, high number of ♯ blossoms, thick copra; small-size, low-flowering tree.

c) Other important points : In Africa, pollinisation is entomophilous; the lightness of the winds (contrary to what is the case in Polynesia) does not encourage the cross-breeding of genotypes. In addition to original genetic deficiency, there is a large proportion of inbreeding.

2) STOCK AVAILABLE TO I.R.H.O. IN IVORY COAST :

a) - Akabo trees : chosen on the basis of nut-quantity
b) - Mensah trees : heavy nut producer
c) - Importations have been realized from Dahomey, Cameroon, Ceylon, Cambodia, Mozambique, Melanesia, Martinique and Tahiti.

3) RESULTS OBTAINED : Stock from Dahomey is superior to that from Ivory Coast. The quantity of copra per nut is inferior in nuts from 8 year old trees than in those from 7 year old trees.

4) SELECTION SCHEME :

a) - General : Production is calculated on the basis of the quantity of copra per nut and number of nuts (Number of leaves then number of ♯ blossoms through inflorescence.

b) - Methods of work : stock selection and cross-breeding.

i) local stock is used for progeny tests
ii) foreign plant stock comprises :

- The "Dwarf stock" which is used for production of seeds Nana x Typica and for certain cross-breedings Nana x Typica.

- The "Typica stock" : cross-breeding of local Typica (high number of small nuts) x foreign Typica (small number of big nuts) in order to obtain the highest possible number of big nuts.

5) CONCLUSION :

After introduction into Ivory Coast of foreign stock we are now beginning to make use of it. We still have to obtain the increase of copra per nut and a bigger number of nuts. Selective work is necessary in various directions by using the different possibilities of genetic varieties of the cocoonut palm.

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